GEOGRAPHIC NEWS BULLETINS

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.

Contents for Week of April 13, 1931. Vol. X. No. 8

1. Norway's Battle of Names.
2. Persia's Modern Art Exhibit Recalls Ancient World Power.
3. Fifteen Countries Have No Seacoast.
4. Gardens Grow among Markers of Ancient Farm Calendar.
5. "Sociability" Brings Chromium into the Spotlight.

© *Photograph by Basil Avezathe*

A BALD HEAD IS STYLISH IN PERSIA

Jolly curb barbers shave the tops of men's heads from the forehead to the back. Customers are shaved but once a week so clippers are preferred (See Bulletin No. 2).

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Norway's Battle of Names

NORWAY'S third city in population might well be called "the town that won't stay named." A recent vote of the Norwegian Odelsting, which corresponds to our House of Representatives, gave the city its latest designation—Trondheim.

Past generations of geography pupils became acquainted with the city as "Trondhjem," although in ancient times it was also, for a long period, called "Nidaros." In 1929, the Norwegian Storting (congress) voted to change from "Trondhjem" to "Nidaros." Immediately a discussion was started throughout Norway, and the people of the city, it developed, were overwhelmingly in favor of retaining the name "Trondhjem." But the law had been passed, and on January 1, 1930, the city became, officially, "Nidaros." Since then the matter of a name for Norway's third city has been a burning question in the kingdom.

New Name Is a Compromise

Early in 1930, proponents of the former name attempted to have the Storting reverse its vote, but failed. A month or so ago the question was again taken up. The vote was 58 for retaining "Nidaros," 54 for returning to "Trondhjem." Then a compromise was proposed, and championed by the municipal officials of Nidaros, to adopt a third name, "Trondheim." This compromise was accepted by the Odelsting by a vote of 80 to 32.

Those who have championed "Trondhjem" in Norway's recent battle of names have presumably been influenced by a desire to cling to forms strengthened by long use. The surrounding district was anciently called "Thrandheimr" (the home of the Trönders). The exact meaning of the latter word is unknown, but it is supposed to mean "those who thrive." In course of time as the language developed the name of the district and city took the form "Trondhjem."

Near Arctic Circle—Climate Is Mild

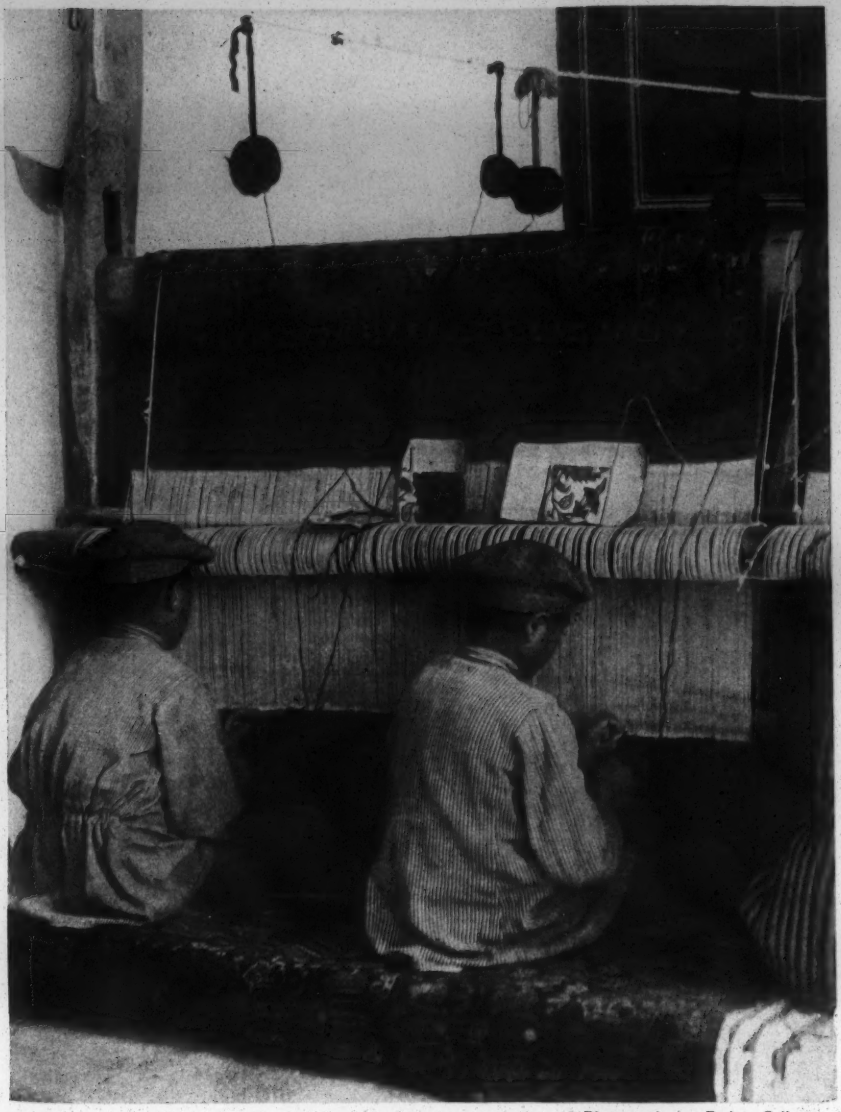
The significance of the name "Nidaros" is apparent; it means "mouth of the Nidar River."

"Trondheim," the newest name, has the same meaning as "Trondhjem"—"Home of the Tronds." It was accepted by many in both factions because it is much closer to the form in the old Norwegian language.

Trondheim lies only three degrees south of the Arctic Circle, but it has a surprisingly mild climate. Its river and fiord are seldom frozen, and its trees and shrubs give it a southern Temperate Zone aspect in summer. Its 56,000 inhabitants are housed almost exclusively in wooden dwellings. Even the royal palace is of wood—one of the largest wooden buildings in the world. The city was the coronation place of early Norse kings, and the present monarch, King Haakon VII, was crowned there in 1906.

Bulletin No. 1, April 13, 1931.

Note: See also "Fjords and Fjells of Viking Land," and "Norway, A Land of Stern Reality," July, 1930, *National Geographic Magazine*, and "Norway and the Norwegian," June, 1924.



© *Photograph by Ewing Galloway*

THE HANDMADE RUGS OF PERSIA ARE VALUED THE WORLD OVER

These boy weavers of Tabriz receive the equivalent of fifty cents a day for their skilled and painstaking labor. Many American rug merchants now maintain their own rug factories in Persia. A portrait of President Hoover woven in silk by a 75-year-old Persian woman has just been presented to him (See Bulletin No. 2).

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Persia's Modern Art Exhibit Recalls Ancient World Power

AN EXHIBIT of Persian art, recently on display in London, has drawn world attention to a nation which for many centuries ruled the world. But Darius, "king of kings," would scarcely recognize his far-flung empire if he were to return to-day.

Conquered and overrun by Greek, Arab, Turk and Mongol armies, the Persians still cling to their national characteristics and culture. Even modern Persian is little different from that spoken by Darius when he met his Waterloo on the Plains of Marathon.

A Land of Extremes

Persia is a land of extremes. Dry and Sahara-like at heart, it has a green fringe of fertile plains. It is perched high on the Iranian Plateau, between independent Afghanistan and British mandated Iraq, yet its northern provinces border the land-locked Caspian Sea below the ocean's level. In summer some city thermometers register 129° with clock-like regularity, but winters are intensely cold. Scorching winds blow across treeless plains which vie in intensity with those recorded by Admiral Byrd in Antarctica. There is almost a perpetual gale at Seistan. Persians call it the "Wind of 120 days."

A natural "spite wall," the cloud-arresting Elburz Mountains, ranges across north Persia. From a high pinnacle, on a clear day, a shepherd tribesman, looking north, may view luxuriant forests and cultivated fields sloping to the Caspian Sea. Yet in the opposite direction all he sees is parched brown, except occasional narrow fingers of green vegetation along valley streams. So moist is the climate in the low Caspian provinces that Persians, accustomed to the hot dry plateau, cannot survive. The Elburz range successfully bars the precious rain clouds from the interior.

Persia, three times the area of France, is practically a trainless country. No sleeper or fast express carries the visitor to Teheran, its beautiful capital. However, Teheran is reached by caravan, automobile or airplane. Modern highways follow ancient trade routes across north Persia. Some day Iran will have a steel highway stretching the length of the country, connecting its principal cities. At present this railroad is only in the construction stage under the direction of American engineers.

Capital the Size of Rochester, N. Y.

Teheran is a city about the size of Rochester, N. Y., in population, but there the similarity ceases. To be sure, Teheran has a few main streets with automobiles and smart traffic officers, but marching down the street, like a circus parade of yore, are lumbering camels laden with merchandise from the East and diminutive donkeys trotting under the loads of beturbaned or sheepskin-capped peasants.

Side streets are narrow and winding like Boston's, but with the added luxury of roofs of straw mats, wisps of which dangle artistically, to protect pedestrians from the hot sun. The many arches of Paris have their counterpart in huge three-way gates, beautifully adorned with mosaic tiles and spindling minarets.

Meat stalls line the streets, carcasses hang in the show case, but there is no plate glass front. Curb barbers shave the tops of men's heads so that many natives seem to have artificially bald heads under their peculiar, domed hats. Bazaars, cobblers, sweets shops and hardware and harness peddlers all are in the public squares or streets. Even Parisian-like restaurants project upon the sidewalks.

© Photograph by P. O. Bugge

IN THIS CATHEDRAL NORWAY'S KINGS HAVE BEEN CROWNED SINCE VIKING DAYS

Begun nine hundred years ago, Trondheim Cathedral is the most northerly in Europe. It is only three degrees south of the Arctic Circle. The architecture of the oldest part is Norman. Norway's national hero, St. Olaf, is buried there.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Fifteen Countries Have No Seacoast

SWITZERLAND is one of fifteen countries in the world which does not have a seacoast. Jests about the Swiss navy might be localized in every continent except North America and Australia.

Few countries have no seaports. The sea, ancient and modern avenue of trade, has mothered nations. North America, settled and developed from its coast lines, has no sea-orphan nations. Many of its divisions, such as United States, Canada, Mexico, Guatemala, Honduras, Costa Rica, Nicaragua, and Panama, have shores on two seas. Canada has a frontage on three oceans.

Europe Has Most Landlocked Nations

In South America only Bolivia and Paraguay have no seacoast, although Paraguay has a water route to the sea by way of the Parana River through Argentina. So important is a good seaport considered that Bolivia, Chile and Peru made a "little Balkans" of the Tacna-Arica district on the west coast.

Europe has the greatest number of landlocked nations—eight in all, counting the small states. Switzerland, Austria, Hungary and Czechoslovakia are the most important. In addition, Andorra, San Marino, Liechtenstein, and Luxembourg must carry on their commerce through adjacent countries. Poland has a lane through Germany to the Baltic Sea, although the principal city on this strip of land, Danzig, is a free port, where Poland is guaranteed certain port privileges.

Africa's Piecemeal Coast

Thirty-eight different political divisions line the coast of Africa. Yet, despite the vast expense of this second largest of continents, only one independent country has no direct access to the sea. Ethiopia (Abyssinia), perched high in the mountains at the headwaters of the Nile, is landlocked, although it is separated from the Red Sea by only a narrow strip of Italian Eritrea and French Somaliland.

Excepting the countries in the Union of Socialist Soviet Republics, which may politically be considered a unit, Asia has four independent states without a shore line on the sea. Afghanistan and the Mongolian Republic are the largest. Nepal and Bhutan, two small states on the Indo-Tibetan border, are the others.

Japan Has Most Coast Line

Disregarding ice-locked islands and coasts along the Arctic Ocean, of which only certain stretches show open water in midsummer, Japan may be said to have the most waterfront of any country in the world. The beaches of its myriad islands and deep bays would, if straightened out, stretch 17,600 miles, or two-thirds the distance around the earth.

The United States, in comparison, has only 12,877 miles of coast line, which does not equal that of its own Alaska. Alaska's shores extend for more than 15,000 miles. Florida leads the States in ocean frontage with some 2,276 miles, and California, Texas and North Carolina are next in the order named.

Homer habitually spoke of the sea as the estranging main, but the Norwegian fiords unite rather than estrange the natives of that country. Skippers navigate big ships through Norway's 12,000 miles of fiords just as they might through deep-cut, man-made canals. Norway has the longest coast line of any country in Europe.

Bulletin No. 3, April 13, 1931.

Their specialty is mutton, the pieces broiled on skewers over an open charcoal fire while the patron waits. The fork is the fingers.

In the mountainous districts of north and west Persia, especially the Elburz and Bakhtiari regions, live tribes of wandering nomads who make up one-third of Persia's nine million population. These primitive tribesmen live hard lives and must be of virile character and tenacious strength. Carrying their low black tents and all their belongings with them, they migrate regularly over mountain ranges and across desert plains. They must have food and grazing lands for their scrawny cattle and fat-tailed sheep. Pasturage is found in mountain valleys during the summer and the plains in the winter.

To-day It Is Oil and Rugs

From sturdy tribes such as these sprang the mighty Empire of Persia, almost in a single generation. The Greek spear and phalanx, breaking through Persia's arrow barrage at Marathon, spelled the doom of that great empire. Alexander the Great finished its world sway when he sacked the magnificent capital of Persepolis, soon to be unearthed and studied by an American expedition. Nevertheless, the Persian Empire has been in existence more or less continuously for over 2,400 years. Even to-day, the "Crown of Darius" is hereditary in the family of the Shah.

Persia is famous for the beauty and quality of its handmade rugs. A notable example is the portrait of President Hoover, woven in silk from a photograph by a 75-year-old woman weaver. This rug has recently been brought to this country from Sultanabad and presented to the President.

Actually, the products of Persia's British-controlled oil fields are the most valuable export, being one of the sources of fuel for Britain's navy.

Bulletin No. 2, April 13, 1931.

Note: For supplementary reading and pictures on Persia and Asia, consult "The World's Greatest Overland Explorer, Marco Polo," in the *National Geographic Magazine*, November, 1928; "Modern Persia and Its Capital," and "The Land of the Lion and the Sun as Seen on a Summer Caravan Trip," April, 1921.

© *Photograph by Harold F. Weston*

PLOWING AS HIS ANCESTORS DID IN THE DAYS OF KING DARIUS

In summer these Arab nomads graze their fat-tailed sheep and cattle and till the soil of the high Persian plateau. When cold weather comes they take all their belongings, including low black tents such as those seen in the background, and migrate over difficult mountain passes to warmer lowlands, in this case the borders of Iraq. It was from such wandering tribesmen as these that the great Persian Empire was built, almost in a single generation.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Gardens Grow among Markers of Ancient Farm Calendar

DR. GILBERT GROSVENOR, President of the National Geographic Society, recently announced a contribution by The Society to the research and reconstruction fund of the Musée J. Miln to aid its director, M. Zacharie Le Rouzic, in further excavation and restoration of the remarkable prehistoric megaliths of Carnac, Brittany.

Aligned as perfectly as a vast army of giant West Point cadets turned to stone in the midst of one of their intricate military maneuvers, 2,813 of these huge stone monuments, called menhirs, spread across the gently rolling Breton countryside. What they represent, who built them, when and why, are questions to which explorers are seeking the answer.

Legend Says Saint Hid in Ox's Ear

Grizzled old peasants of white-washed Le Menec, set in the midst of this state-preserved megalithic park, will tell you that the Cyclopean monuments are soldiers of a heathen army which, in ancient times, pursued St. Cornely, the Patron Saint and protector of horned cattle. When the Saint was finally cornered near the sea, he took refuge in an ox's ear and proceeded to turn his pursuers to stone in their tracks. Others believe that the pillars were windbreaks for the tents of an encampment of Roman Legionaries or that the monuments mark the burial ground of some ancient decisive battle.

But, all superstitious beliefs to one side, the theory expounded by M. Le Rouzic is that the megaliths were set up by a Celtic civilization of sun-worshipers. Ever reaching out toward the resting place of their god, the sun, this prehistoric race migrated ages ago from Asia, across North Africa to Spain, France, and Scandinavia. While in western climes, the Celts gradually became more agricultural, as indicated by the general deterioration of the stone implements and weapons found. This change of character eventually proved their destruction, for they were unable to beat back the all-conquering bronze-sworded Gauls who swarmed down from the north.

Introducing Menhirs and Dolmens

The weird megaliths at Carnac and vicinity may be divided into two general groups, the menhirs and the dolmens. The former are tall, elongated stones usually ranging in height from 3 to 20 feet, which were set up on end by some strange herculean power. The dolmens are sepulchral compartments used for burial by the ancient people. They are constructed of large stones resembling menhirs for the walls and a huge flat stone for the roof.

Believed to be vast open-air temples, three intricate alignments, which are long parallel rows of menhirs, stretch across the gorse and heath-covered fields near Carnac. At one end of these avenues, as the long files are called, there is often a circular formation of the tall stones called a cromlech.

That these peculiar circles had some bearing on the sun worship of the prehistoric Celts long was the theory of scientists. Finally, it was discovered that all of the alignments have a definite orientation toward the sunrise. If a person stands in a certain spot in the cromlech and observes the sun rising over a towering giant menhir located in an outer file, he knows that the day is a solstice or equinox, as the case may be. Evidently, the ancients connected their solar worship with the

© National Geographic Society

A MARINE BUTTERFLY FLOATING IN THE SHADOW OF THE SWISS ALPS

While Switzerland may have no seacoast, she does have sailors. Lovely pictures such as this of red-winged little boats sailing on Lake Geneva are as common to Europeans as post cards of the Lincoln Memorial in Washington are to Americans. Swift steamers are rapidly replacing this slower but more picturesque mode of transportation.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

"Sociability" Brings Chromium into the Spotlight

"HOW do they keep that tower shiny?"

That is the question often heard on the streets of New York when visitors come within eyeshot of the gleaming chromium alloy towers of some of the city's newest skyscrapers.

Curiosity among Metals

Chromium was a curiosity to metallurgists a century ago; now a single American factory plates more than 2,000 articles with chromium. For years after chromium was discovered, science failed to utilize it. The metal needed society. When it was found to mix with other metals it began its meteoric rise in the metal world.

A small percentage of chromium, mixed with steel, iron, brass and other metals, produces a hard, tough alloy with high heat resistance. Chromium thwarts rust and corrosion; it resists the attack of all but two chemicals. Perhaps the most widely known feature of chromium is the mirror-like polish of chromium plate.

Promotes High-Speed Machinery

Without chromium a leading American automobile factory would require a plant seven times its present size to produce the same number of automobiles, because tools and machine parts containing chromium withstand the stress and strain of high-speed machinery.

The commuter has a somewhat "chromiumized" day. When he awakens one of the first things he sees is the bedroom wall paper which probably was printed on a chromium-plated press, and his wife dons a dress with colored designs that were printed by a chromium-plated die. He turns a bright, chromium-plated door knob on the bathroom door, makes shaving lather on his face with water from chromium-plated faucets and shaves with a chromium-plated razor.

His coffee may be percolated in a chromium-plated pot. The knife that cuts his morning grapefruit does not stain because its blade contains chromium. Possibly his cereal was cooked in a brilliant chromium-plated pan, and his eggs and pancakes were fried in chromium-plated utensils.

Helps Make Paper Money

Available for preparation of another meal is the spotless chromium-plated waffle iron, toaster and teapot of permanent luster.

The paper money his wife uses to purchase the day's groceries and the postage stamps that adorn his morning mail were printed from a chromium-plated engraved die at the Bureau of Engraving and Printing in Washington, D. C. A mere film of chromium will extend the life of engraving dies three times longer than naked plates.

Watches and locomotive axles, engine driving rods and rails are treated with the magic metal.

Although chromium plate has been in wide commercial use less than ten years, many automobile makers now plate radiator shells, headlight shells, door handles, bumpers, hub caps, and trimmings with chromium. Under the hood are numerous chromium alloy and plated parts. Without their strengthening qualities, the motor

astronomical calendar and possibly used it also as an indicator of the agricultural seasons for sowing and harvesting.

Because of astronomical variations over a period of centuries, the orientation of the megaliths is not accurate to-day. Astronomers have computed mathematically the approximate date when the alignments were correct, and hence we now know that the Celtic culture must have attained its height around the time of the erecting of the megaliths about 1600 B. C. This estimate coincides with M. Le Rouzic's calculations, based on his study of buried treasure, such as stone implements, flints, necklaces, skeletons, bronze and iron utensils, and even Roman statuettes and coins, which he has found in the dolmen tombs.

Brittany, especially that part in the neighborhood of Carnac and Locmariaguer, must have been, for the ancient people, a veritable Arlington National Cemetery. Dolmens with surrounding cromlechs and alignments are scattered and dotted about the country-side. Some of the larger dolmens, covered with mounds of earth known as tumuli, look like natural hills. The burial place of some powerful chieftain, the tumulus of Mont St. Michel with a tiny chapel on its summit, looms from the plains like a small mountain and offers a fine vantage point from which to view the menhirs on parade.

The Village of Le Menec is situated in the midst of an alignment. The menhirs form the walled fences for the cattle and the boundaries between property. Vegetable gardens grow among the monuments, and little children in clean, neat Breton costumes play hide and seek in and out of the dolmens.

Bulletin No. 4, April 13, 1931.

Note: See also "The Mysterious Prehistoric Monuments of Brittany," and "Through the Back Doors of France," July, 1923, *National Geographic Magazine;* "St. Malo, France, Ancient City of Corsairs," August, 1929.

© *National Geographic Society*

STONE MENHIRS ON PARADE AT CARNAC

Breton peasants believe these huge monuments are soldiers of a pagan army who were chasing St. Cornely, the protector of horned cattle, and were turned to stone by him. Actually, scientists say they form part of a gigantic agricultural calendar erected by sun-worshiping Celts many thousands of years ago.

would be larger. Chromium may have been mixed with the steel of which the chassis was molded.

Many tons of chromium alloy and chromium plate go into the construction of modern buildings. No longer must the mariner gaze upon pock-marked rails and fittings on his craft, for chromium alloy fittings resist the corrosion of salt spray.

World War Helped Industry

In the chemical industry chromium has made its mark in tanning leather. Chromium-treated leather resists the disintegrating effects of many chemicals and water. In 1928, American oil refineries found that chromium reduced corrosion of cracking chambers treating high sulphur oils. In the paper industry, chromium plate has lengthened the life of tubes used for the evaporation of waste sulphate liquor. Heat-resisting qualities of chromite, the mineral source of chromium, make it valuable as a lining for open-hearth furnaces.

Chromite has been mined in all continents except the Antarctic.

In 1830, a young Maryland metallurgist found a cider barrel tilted against an odd piece of "rock." He discovered the "rock" was chromite, and later opened a mine near Baltimore, Maryland. Maryland led in production of chromium from 1830 until 1870. It was unseated by Turkey, which held first place until 1903. Rhodesia and New Caledonia jockeyed for first position after Turkey relinquished its place. For one year—1918—the United States took the lead, when the demand for chromium for armor plate and projectiles temporarily brought the slumbering industry to life. To-day, South Rhodesia is the world's greatest chromite producing region.

Bulletin No. 5, April 13, 1931.

See also: "Under the South African Union," *National Geographic Magazine*, April, 1931.

© *Photograph by Pacific and Atlantic*

THESE ARE INFLATED "MOBY DICKS," NOT OVER-SIZED FOOTBALLS

Norway controls the world's whaling industry, once such a profitable business for Yankee ships sailing out of New England ports. Norwegian whalers steam nearly 20,000 miles to the Antarctic, almost to the front door of Little America, searching for these fast-disappearing monsters of the deep. Whales now are caught and killed by harpoon shells shot from a chaser such as this, and then blown up with air to prevent sinking. After towing to a giant mother ship, really a floating factory, they are hauled in through a great hole or hatch in the bow and boiled down in huge vats into whale oil (See Bulletin No. 1).